

Federal Automotive Statistical Tool Vehicle-Level Data Business Rules Reference

October 1, 2020

Disclaimer

This information was prepared as an account of work sponsored by an agency of the U.S. Government. Neither the U.S. Government nor any agency thereof, nor any of their employees, makes any warranty, expressed or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness, of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights. References herein to any specific commercial product, process, or service by trade name, trademark, manufacturer, or otherwise, does not necessarily constitute or imply its endorsement, recommendation, or favoring by the U.S. Government or any agency thereof. The views and opinions of authors expressed herein do not necessarily state or reflect those of the U.S. Government or any agency thereof.

Federal Automotive Statistical Tool Vehicle-Level Data Business Rules Reference

October 1, 2020

Idaho National Laboratory
Idaho Falls, Idaho 83415

Prepared for the
U.S. Department of Energy
Office of Energy Efficiency and Renewable Energy
Under DOE Idaho Operations Office
Contract DE-AC07-05ID14517
and the
U.S. General Services Administration
Office of Governmentwide Policy
Under Strategic Partnerships Program
Contract 00709

Contents

Abbreviations and Acronyms

Overview

 Additional Information about FAST

 Feedback

Business Rules Reference

Revision History

Appendix A - Vehicle Makes

Appendix B - Law Enforcement and Emergency Response Designations

Appendix C - Valid Fuel Type / Fuel Unit Combinations

Abbreviations and Acronyms

4x2	two-wheel drive
4x4	four-wheel drive
AFV	alternative fuel vehicle
CFR	Code of Federal Regulations
DOE	U.S. Department of Energy
EISA	Energy Independence and Security Act
EO	Executive Order
EPAct	Energy Policy Act
FAST	Federal Automotive Statistical Tool
FMR	Federal Management Regulation
FY	fiscal year
GGE	gasoline gallon equivalent
GSA	U.S. General Services Administration
GVWR	gross vehicle weight rating
HD	heavy duty
LD	light duty
LGHG	low greenhouse gas
LSEV	low-speed electric vehicle
MD	medium duty
MIS	management information system
mpg	miles per gallon
MSA	metropolitan statistical area
POC	point of contact
SUV	sport utility vehicle
USPS	U.S. Postal Service
VLD	vehicle-level data
XML	extensible markup language

Overview

This document is the second of three primary documents intended to aid federal agency fleet managers and information systems support personnel in transitioning their systems and processes to reporting vehicle-level data (VLD). For additional information about these documents and the collection of VLD via the Federal Automotive Statistical Tool (FAST), see the Overview section of the first document, “Federal Automotive Statistical Tool Vehicle-Level Data Element Reference”. Current versions of all three documents will be available for download at <https://fastweb.inl.gov/help/index.cfm/resources/vehicle-level-data>.

This second document describes all of the business rules that are used to evaluate the validity and quality of VLD with respect to FAST. Each business rule is listed in connection with the data element to which it applies and is characterized in the following section with:

- The unique identifier of the associated data element
- The name of the associated data element
- A unique identifier for the rule, based on the identifier belonging to the associated data element
- A description of the rule, including (where applicable) lists of specific acceptable values (with those values shown in MONOSPACED TEXT)
- An indication of whether violations of the rule will “block” the entry of the data or “flag” the data. Any violation of blocking rules will prevent the data from being imported into FAST and must be resolved in the import file before any data from the file will be imported. Violations of flagging rules will not prevent data from being imported; rather, flagged data will be presented to the reporting agency as suspect and may merit further review.

Note: All data elements must be specified unless one or more business rules for an element specifically note situations in which that element may be omitted. Some data elements which may be omitted will receive a default value (noted in the rule description); readers should ensure that use of such default values is appropriate and accurate for the corresponding vehicle within their specific fleet.

Additional Information about FAST

Background and additional information about FAST, its underlying requirements, and its use are available at <https://fastweb.inl.gov/help/>.

Feedback

Questions and suggestions related to the content of this document should be directed to:

Ron Stewart
FAST Technical Team Lead
Idaho National Laboratory
ron.stewart@inl.gov

Business Rules Reference

Element	Element Name	ID	Business Rule	Class
FL-1	Fleet Abbreviation	FL-1.1	Type: text string with a maximum of 48 characters	Block
		FL-1.2	Content: must not be empty or blank	Block
		FL-1.3	Content: alphanumeric characters plus space, period, slash, and dash; first character must be alphanumeric	Block
		FL-1.4	Must match exactly one existing hierarchy element within the reporting agency's reporting structure in FAST for the corresponding report year and must be unique within a file being imported into the system	Block
		FL-1.5	For data imported by a FAST user via FAST's user interface, must match a hierarchy element within the reporting agency's reporting structure in FAST for which the user has permission to enter data. Not applicable to data imported via automated fleet MIS-to-FAST interface.	Block
FL-2	Fleet Point of Contact	FL-2.1	Type: text string with a maximum of 64 characters	Block
		FL-2.2	Content: must not be empty or blank	Block
		FL-2.3	Content: alphabetic characters plus space, period, dash, and apostrophe; first character must be alphabetic	Block
FL-3	Fleet POC Email	FL-3.1	Type: text string with a maximum of 64 characters	Block
		FL-3.2	Content: must be a syntactically valid email address	Block
FL-4	Fleet Comment	FL-4.1	Type: text string with a maximum of 64 characters (element may be omitted)	Block
A-1	Unique Vehicle Identifier	A-1.1	Type: text string with a maximum of 36 characters	Block
		A-1.2	Content: must not be empty or blank	Block
		A-1.3	Content: alphanumeric characters plus period and dash; first character must be alphanumeric	Block
		A-1.4	Must be unique across all vehicles within reporting agency and within a file being imported into the system	Block
		A-1.5	For any vehicle existing in previous year's inventory, flag any immutable attribute (listed	Flag

			<p>below) that has changed from previous year's entry:</p> <p>A-2 Make A-3 Model A-4 Model Year A-6 Vehicle Type A-7 Vehicle Fuel Type/Configuration OW-1 Acquisition Date OW-2 Ownership Type S-1 EPA Act Coverage Designation S-3 EISA Section 141 Designation * S-6 Law Enforcement Designation S-7 Emergency Response Designation S-8 Armored Designation</p> <p>* Changes to EISA Section 141 Designation (S-3) will only be flagged if Acquisition Date (OW-1) also changes in a manner that results in a vehicle being considered an acquisition in the year for which data is being reported.</p>	
A-2	Make	A-2.1	Type: enumeration; must match exactly one valid vehicle make designation (see Appendix A)	Block
A-3	Model	A-3.1	Type: text string with a maximum of 48 characters	Block
		A-3.2	Content: must not be empty or blank	Block
		A-3.3	Content: alphanumeric characters, dash (/), and space; first character must be alphanumeric	Block
A-4	Model Year	A-4.1	Type: integer	Block
		A-4.2	Minimum value: 1900	Block
		A-4.3	<p>Maximum value: year of acquisition (from Acquisition Date [OW-1]) + threshold determined by vehicle class:</p> <p>Sedans/St Wgns: year of acquisition + 1 LSEVs: year of acquisition + 1 Ambulances: year of acquisition + 2 Buses: year of acquisition + 2 LD 4x2: year of acquisition + 1 LD 4x4: year of acquisition + 1 MD: year of acquisition + 1 HD: year of acquisition + 2</p>	Block
		A-4.4	<p>Must be consistent with year of acquisition: cannot be significantly less than year of acquisition based on vehicle weight class-specific thresholds:</p> <p>LD vehicles: 3 years (i.e., model year must not be</p>	Flag

			<p>more than 3 years less than year of acquisition) MD vehicles: 6 years HD vehicles: 12 years</p> <p>(This rule is not enforced for vehicles designated as disposed based on Disposal Date [OW-4].)</p>	
A-5	GVWR	A-5.1	Type: integer	Block
		A-5.2	Minimum value: 500	Block
		A-5.3	Maximum value: 100,000	Block
		A-5.4	Maximum reasonable value: 80,000	Flag
A-6	Vehicle Type	A-6.1	<p>Type: enumeration; must match one of the following values:</p> <p>Low-speed Vehicle Sedan/St Wgn Subcompact (* see note below) Sedan/St Wgn Compact Sedan/St Wgn Midsize Sedan/St Wgn Large Sedan Limousine LD SUV 4x2 LD SUV 4x4 LD Minivan 4x2 (Passenger) LD Minivan 4x2 (Cargo) LD Minivan 4x4 (Passenger) LD Minivan 4x4 (Cargo) LD Van 4x2 (Passenger) LD Van 4x2 (Cargo) LD Van 4x4 (Passenger) LD Van 4x4 (Cargo) LD Pickup 4x2 LD Pickup 4x4 LD Ambulance LD Other 4x2 MD Sedan/St Wgn Large MD Sedan Limousine MD SUV MD Van (Passenger) MD Van (Cargo) MD Pickup MD Ambulance MD Bus MD Other Ambulance (** see note below) HD HD Ambulance HD Bus</p> <p>* Subcompact includes all sedan/station wagon</p>	Block

			vehicle types designated as subcompact or smaller (e.g., micro- or mini-compact). ** Value Ambulance has been deprecated for FY 2018 reporting and will be retired at a future date. Reporting organizations should transition to the equivalent MD Ambulance vehicle type.	
		A-6.2	Must be consistent with GVWR (A-5): vehicles with GVWR of 8,500 lbs or less must be designated with a LD vehicle type or with MD Other (if they have a "basic vehicle frontal area" of 45 sq. ft. or more, per 40 CFR 86.082-2); vehicles with GVWR between 8,501 and 16,000 lbs must be designated with a MD vehicle type; vehicles with a GVWR over 16,000 lbs must be designated with a HD vehicle type	Block
		A-6.3	Vehicles designated with MD Other vehicle type with GVWR (A-5) of 8,500 lbs or less will be flagged, per description of rule A-6.2, above	Flag
A-7	Vehicle Fuel Type/Configuration	A-7.1	Type: enumeration; must match exactly one of the following vehicle fuel type and engine configuration combination designations: CNG DE DSL DE DSL HY DSL/CNG BI DSL/ELE PH DSL/LNG BI ELE DE GAS DE GAS HY GAS/CNG BI GAS/E85 FF GAS/ELE PH GAS/LNG BI GAS/LPG BI HYD DE LPG DE Engine configurations used above include the following: BI Bi-fuel DE Dedicated FF Flex-fuel HY Hybrid (i.e., conventional hybrid) PH Plug-in Hybrid	Block
		A-7.2	Must be consistent with Vehicle Type (A-6): vehicle type and fuel type/configuration combination must match a combination defined as being available in FAST	Block

A-8	Garage - Domestic	A-8.1	Type: enumeration; if specified, must match one of the following values (if omitted, value of YES will be assumed): NO (vehicles are located in an area considered foreign for FAST reporting) YES (vehicles are located in an area considered domestic for FAST reporting)	Block
A-9	Location Withheld	A-9.1	Type: enumeration; if specified, must match one of the following values (if omitted, value of NO will be assumed): NO YES	Block
		A-9.2	Must be consistent with Garage - Domestic (A-8): only domestic vehicles may be designated as location withheld	Block
		A-9.3	Vehicles designated as location withheld should carry one or more attributes corresponding to vehicles for which withholding location typically makes sense: <ul style="list-style-type: none"> • Designation as a law enforcement vehicle (S-6) • Designation as an emergency response vehicle (S-7) • Designation as an armored vehicle (S-8) 	Flag
A-10	Garage - ZIP	A-10.1	Type: text string with a length of exactly five characters	Block
		A-10.2	Content: only digits allowed	Block
		A-10.3	Must be omitted if vehicle is not designated as being in a domestic location (A-8)	Block
		A-10.4	Must be omitted if vehicle is designated as location withheld (A-9)	Block
		A-10.5	If specified, must be a valid ZIP code corresponding to a geographic location or assigned to a specific organization/location (i.e., ZIP code cannot be a P.O. box or military APO ZIP code)	Block
A-11	Garage - Latitude	A-11.1	Type: decimal	Block
		A-11.2	Minimum value: -14.38 (corresponds to -14.38° N, American Samoa)	Block
		A-11.3	Maximum value: 71.39 (corresponds to 71.39° N, Point Barrow, Alaska)	Block

		A-11.4	Must be omitted if vehicle is not designated as being in a domestic location (A-8)	Block
		A-11.5	Must be omitted if vehicle Garage - ZIP (A-10) is specified	Block
		A-11.6	Must be omitted if vehicle is designated as location withheld (A-9)	Block
		A-11.7	Must be specified if Garage - ZIP (A-10) is omitted and vehicle is designated as being in a domestic location (A-8)	Block
		A-11.8	If specified, must be verifiable in conjunction with Garage - Longitude (A-12) as corresponding to a domestic location	Block
		A-11.9	If specified, precision for reporting this element must be at least 2 but no more than 6 decimal places	Block
A-12	Garage - Longitude	A-12.1	Type: decimal	Block
		A-12.2	Minimum value: -180.00	Block
		A-12.3	Maximum value: 180.00	Block
		A-12.4	Must be omitted if vehicle is not designated as being in a domestic location (A-8)	Block
		A-12.5	Must be omitted if vehicle Garage - ZIP (A-10) is specified	Block
		A-12.6	Must be omitted if vehicle is designated as location withheld (A-9)	Block
		A-12.7	Must be specified if Garage - ZIP (A-10) is omitted and vehicle is designated as being in a domestic location (A-8)	Block
		A-12.8	If specified, must be verifiable in conjunction with Garage - Latitude (A-11) as corresponding to a domestic location	Block
		A-12.9	If specified, precision for reporting this element must be at least 2 but no more than 6 decimal places	Block
A-13	Agency Budget Element Code	A-13.1	Type: text string with a maximum of 32 characters	Block
		A-13.2	Content: alphabetic or dash ("-") characters	Block
		A-13.3	If specified, must match exactly one existing budget element code for the reporting agency	Block

		A-13.4	If omitted, agency must have exactly one defined budget element code (which will be used as the default)	Block
A-14	Agency Sort Field	A-14.1	Type: text string with a maximum of 64 characters (element may be omitted)	Block
		A-14.2	Content: alphanumeric characters, space, or special characters (e.g., punctuation), excluding quotes and apostrophes	Block
A-15	Vehicle Comment	A-15.1	Type: text string with a maximum of 64 characters (element may be omitted)	Block
OW-1	Acquisition Date	OW-1.1	Type: date in XML-standard YYYY-MM-DD format	Block
		OW-1.2	Must be a valid date on or prior to the end of the report year for which data is being submitted	Block
		OW-1.3	Vehicles with acquisition dates in the report year for which data is being submitted should not be present in previous year's submission (with exception for agency in first year of VLD reporting)	Flag
		OW-1.4	Vehicles with acquisition dates in previous report years should also be present in previous year's submission (with exception for agency in first year of VLD reporting)	Flag
OW-2	Ownership Type	OW-2.1	Type: enumeration; must match one of the following values: A0 (Agency-owned) CL-D (Commercial dry lease) CL-W (Commercial wet lease) GL-D (General Services Administration [GSA] dry lease) GL-W (GSA wet lease)	Block
OW-3	Vehicle Assignment Type	OW-3.1	Type: enumeration; must match one of the following values: INDIV (Vehicle is assigned to a specific person or official) OFFICE (Vehicle is assigned to and available for use by the personnel of an office) POOL (Vehicle is assigned to a motor pool for use by multiple offices) SHARED (Vehicle is shared by two or more federal agencies)	Block
OW-4	Disposal Date	OW-4.1	Type: date in XML-standard YYYY-MM-DD format	Block
		OW-4.2	If specified, must be within report year for which data is being submitted	Block

		OW-4.3	If specified, must be on or after vehicle's Acquisition Date (OW-1)	Block
		OW-4.4	Prior year's submission for this vehicle, if present, cannot have had a disposal date specified	Flag
OW-5	Disposal Reason	OW-5.1	<p>Type: enumeration; must match one of the following values (if omitted, value of N/A will be assumed):</p> <p>N/A (Not applicable; vehicle is not disposed)</p> <p>AO-REPL-ES (Agency-owned vehicle disposed of using exchange/sale authority and replaced by newer vehicle)</p> <p>AO-REPL-NES (Agency-owned vehicle disposed of not using exchange/sale authority and replaced)</p> <p>AO-NOT-REPL (Agency-owned vehicle disposed of with no replacement)</p> <p>AO-DONATION (Agency-owned vehicle donated through the State Agencies for Surplus Property program)</p> <p>AO-TRANSFER (Agency-owned vehicle transferred to ownership of another federal agency)</p> <p>AO-ACCIDENT (Agency-owned vehicle totaled in an accident)</p> <p>AO-DESTROYED (Agency-owned vehicle intentionally destroyed; for example, due to nuclear or other toxic contamination)</p> <p>GL-REPL (GSA fleet vehicle turned in to GSA for scheduled replacement)</p> <p>GL-NOT-REPL (GSA Fleet vehicle returned to GSA without replacement)</p> <p>GL-ACCIDENT (GSA Fleet vehicle returned to GSA after being totaled in an accident)</p> <p>CL-LEASE-EXP (Commercially leased vehicle returned at end of lease)</p> <p>OTHER (Any reason not listed above)</p>	Block
		OW-5.2	Must be specified and must not be N/A if Disposal Date (OW-4) is specified	Block
		OW-5.3	Must either be omitted or specified as N/A if Disposal Date (OW-4) is omitted	Block
		OW-5.4	Must be consistent with Ownership Type (OW-2): if specified, disposal reason must be OTHER or a reason appropriate for the ownership type of the vehicle	Block
S-1	EPAct Coverage Designation	S-1.1	<p>Type: enumeration; if, specified, must match one of the following values (if omitted, value of DEFAULT will be assumed):</p> <p>DEFAULT (Coverage/exemption of vehicle will be</p>	Block

			determined based on agency- and vehicle-specific attributes including parent agency, location, LE designation, ER designation, vehicle type, GVWR) EX-GEO (Subject vehicle within EPAct-covered agency designated as exempt because it is based outside of a metropolitan statistical area [MSA]) EX-NONMSA (Subject vehicle within EPAct-covered agency designated as exempt because it is based in an MSA but operates primarily outside of an MSA)	
		S-1.2	Must be consistent with agency's EPAct designation: only vehicles reported by agencies designated as EPAct-covered by DOE may be designated as EX-GEO or EX-NONMSA	Block
		S-1.3	Must be consistent with Garage - Domestic (A-8): only domestic vehicles may be designated as EX-GEO or EX-NONMSA	Block
		S-1.4	Must be consistent with vehicle's Law Enforcement Designation (S-6) and Emergency Response Designation (S-7): LE and ER vehicles must be designated as DEFAULT	Block
		S-1.5	Must be consistent with Vehicle Type (A-6): only vehicles in light-duty (LD) vehicle types may be designated as EX-GEO and EX-NONMSA	Block
S-2	EPAct 2005 Section 701 Designation	S-2.1	Type: enumeration; must match one of the following values: EXEMPT (Vehicle is not subject to Sec. 701) FLEETDASH (Vehicle is subject to Sec. 701 and is present in FleetDASH; FleetDASH will be used to determine waiver standing and Sec. 701 compliance) NO-WAIVER (Vehicle is subject to Sec. 701 and does not require waiver) WREQ-DISTANCE (Vehicle is subject to Sec. 701 and agency requests waiver for vehicle based on alt. fuel not being available within 3-mile radius of vehicle garage location) WREQ-NOACCESS (Vehicle is subject to Sec. 701 and agency requests waiver for vehicle based on nearby fuel station[s] not providing access to agency driver[s]) WREQ-FUELCARD (Vehicle is subject to Sec. 701 and agency requests waiver for vehicle based on nearby fuel station[s] not accepting fuel payments using agency fuel card) WREQ-COST (Vehicle is subject to Sec. 701 and agency requests waiver for vehicle based on alt. fuel being unreasonably more expensive than	Block

			<p>gasoline at nearby fuel station[s]) DEFAULT (Vehicle will be evaluated for handing in waiver process based on relevant agency and vehicle attributes)</p> <p>If not specified or if specified using the designation DEFAULT, FAST and the DOE Federal Fleet team managing the EPOA 2005 Sec. 701 waiver request and compliance process will assign the designation as follows:</p> <ul style="list-style-type: none"> • All disposed vehicles, all vehicles in EPOA-exempt agencies' fleets, all foreign vehicles in EPOA-covered agencies' fleets, and all exempt vehicles (including single-fueled vehicles) in EPOA-covered agencies' fleets will be assigned the designation EXEMPT • Vehicles in agency fleets or portions of agency fleets known to be in FleetDASH will be assigned the designation FLEETDASH • All other vehicles will be assigned the designation NO-WAIVER <p>To the greatest extent feasible, agencies are encouraged to use the DEFAULT designation described above to minimize their reporting burden, particularly for agencies with all or most of their Sec. 701-relevant vehicles in FleetDASH.</p> <p>The following previously-supported designations have been deprecated but will be supported for reporting through at least the FY 2021 submission cycle (Oct-Dec 2021) to provide reporting agencies time to modify their reporting processes and systems to support the above designations:</p> <ul style="list-style-type: none"> • EX (previously meant Sec. 701 did not apply to vehicle; will be treated as EXEMPT, described above) • COV (previously meant vehicle did not have waiver from Sec. 701 requirement; will be treated as NO-WAIVER, described above) • WAIV (previously meant vehicle had been granted waiver from Sec. 701 requirement; will be treated as WREQ-DISTANCE, described above) <p>Agencies using reporting processes which have not been updated to support the new designations described above <i>and</i> who do not have vehicles in FleetDASH <i>and</i> who require the use of the deprecated WAIV designation for waiver requests</p>	
--	--	--	--	--

			<i>for reasons other than distance from the vehicle garage location to alternative fuel (as described above) should contact the FAST support team (FASTsupport@inl.gov) for assistance.</i>	
		S-2.2	Must be consistent with agency's EPAct designation: only vehicles reported by agencies designated by DOE as EPAct-covered may be designated as NO-WAIVER, FLEETDASH, any of the WREQ- designations, COV (deprecated), or WAIV (deprecated); vehicles reported by agencies designated by DOE as EPAct-exempt must be designated as EXEMPT, DEFAULT, not specified, or EX (deprecated). (This rule is not enforced for vehicles designated as disposed based on Disposal Date [OW-4].)	Block
		S-2.3	Must be consistent with Garage - Domestic (A-8): foreign vehicles in EPAct-covered agencies' fleets must be designated as EXEMPT, DEFAULT, not specified, or EX (deprecated); only domestic vehicles in EPAct-covered agencies' fleets may be designated as NO-WAIVER, FLEETDASH, any of the WREQ- designations, WAIV (deprecated), or COV (deprecated). (This rule is not enforced for vehicles designated as disposed based on Disposal Date [OW-4].)	Block
		S-2.4	Must be consistent with vehicle's Law Enforcement Designation (S-6) and Emergency Response Designation (S-7): LE and ER vehicles in EPAct-covered agencies' fleets must be designated as EXEMPT, DEFAULT, not specified, or EX (deprecated). (This rule is not enforced for vehicles designated as disposed based on Disposal Date [OW-4].)	Block
		S-2.5	Must be consistent with Vehicle Fuel Type/Configuration (A-7): domestic, non-LE, non-ER vehicles in EPAct-covered agencies' fleets and which are capable of consuming both petroleum and one or more other alternative fuels (including electricity) must be designated as NO-WAIVER, FLEETDASH, any of the WREQ- designations, DEFAULT, not specified, COV (deprecated), or WAIV (deprecated); all other vehicles must be designated as EXEMPT, DEFAULT, not specified, or EX (deprecated). (This rule is not enforced for vehicles designated as disposed based on Disposal Date [OW-4].)	Block
		S-2.6	Must be consistent with Location Withheld (A-9): vehicles in EPAct-covered agencies' fleets and which are designated as location withheld cannot	Flag

			be granted location-based waivers using any of the WREQ- designations or the WAIV designation (deprecated) without supporting information provided by the requesting agency. Contact the DOE Federal Fleet team managing the waiver request process (federal.fleets@nrel.gov) for assistance. (This rule is not enforced for vehicles designated as disposed based on Disposal Date [OW-4].)	
S-3	EISA Section 141 Designation	S-3.1	<p>Type: enumeration; must match one of the following values:</p> <p>YES (Low greenhouse gas [LGHG]-emitting vehicle)</p> <p>FOR (Vehicle not manufactured for sale in the United States, so EISA Section 141 requirement does not apply)</p> <p>LAW (Vehicle acquired by confiscation, forfeiture, or donation, so EISA Section 141 requirement does not apply)</p> <p>NMD (Medium-duty vehicle is not a passenger vehicle, per EISA Section 141 definition, so EISA Section 141 requirement does not apply)</p> <p>FUN (Functional needs exception: Agency has certified in writing, per EISA Section 141 guidance, that no available low LGHG-emitting vehicle serves the necessary function)</p> <p>ALT (Alternative measures exception: Agency has taken alternative measures, per EISA Section 141 guidance, to reduce its greenhouse gas emissions and petroleum consumption instead of acquiring an available LGHG-emitting vehicle)</p> <p>NON (Not an LGHG-emitting vehicle, and no other code explains why)</p> <p>GLR (GSA leased reassigned vehicle, so EISA Section 141 does not apply; for use exclusively for leased vehicles reassigned by GSA Fleet from one Federal agency to a second Federal agency)</p> <p>N/A (EISA Section 141 requirement not applicable because vehicle is a medium-duty cargo vehicle, heavy-duty vehicle, or low-speed vehicle; or because vehicle model year is less than 2011 and therefore not subject to EISA Section 141)</p>	Block
		S-3.2	Must be consistent with Model Year (A-4), Vehicle Type (A-6), Vehicle Fuel Type/Configuration (A-7): designation must correspond to a valid choice based on applicability of EISA Section 141 to vehicle type and availability of LGHG vehicles in specific year/vehicle type/fuel configuration combinations as defined in FAST	Block
		S-3.3	Must be specified as N/A if Model Year (A-4) is	Block

			less than 2011	
		S-3.4	If specified as GLR, must be consistent with Ownership Type (OW-2) corresponding to a GSA leased vehicle (either GL-W or GL-D)	Block
		S-3.5	If specified as NMD, GVWR (A-5) must be greater than or equal to 10,000 or Vehicle Type (A-6) must specify a MD vehicle type which can exempt the vehicle based on passenger capacity (per EISA Section 141 guidance) such as MD Van (Passenger)	Block
		S-3.6	If specified as GLR, Model Year (A-4) must be less than or equal to the fiscal year of acquisition as specified by Acquisition Date (OW-1)	Flag
S-4	<i>Removed and retired as of Rev. 15</i>			
S-5	Petroleum-Dedicated LGHG Vehicle Qualifying as AFV	S-5.1	Type: enumeration; if specified, must match one of the following values (if omitted, value of NO will be assumed): NO YES	Block
		S-5.2	Must be consistent with Garage - Domestic (A-8): only domestic vehicles (A-8) may be designated as petroleum-dedicated LGHG AFVs	Block
		S-5.3	Must be consistent with Vehicle Fuel Type/ Configuration (A-7): only vehicles with GAS DE and DSL DE fuel type/configurations may be designated as petroleum-dedicated LGHG AFVs	Block
		S-5.4	Must be consistent with vehicle's EISA Section 141 Designation (S-3): only vehicles designated as LGHG acquisitions may be designated as petroleum-dedicated LGHG AFVs	Block
S-6	Law Enforcement Designation	S-6.1	Type: enumeration; if specified, must match one of the following values (if omitted, value of NO will be assumed): NO (Vehicle is not an LE vehicle) YES (Vehicle is an LE vehicle consistent FAST reporting guidance)	Block
		S-6.2	Must be consistent with Vehicle Type (A-6): see Appendix B for vehicle types which can be designated as LE vehicles	Block
S-7	Emergency Response Designation	S-7.1	Type: enumeration; if specified, must match one of the following values (if omitted, value of NO will be assumed):	Block

			NO YES	
		S-7.2	Must be consistent with vehicle's Law Enforcement Designation (S-6): vehicles cannot be designated as both LE and ER vehicles	Block
		S-7.3	Must be consistent with Vehicle Type (A-6): see Appendix B for vehicle types which can be designated as ER vehicles	Block
S-8	Armored Designation	S-8.1	Type: enumeration; if specified, must match one of the following values (if omitted, value of NO will be assumed): NO YES	Block
		S-8.2	Must be consistent with Vehicle Type (A-6): vehicles designated as MD Sedan/St Wgn Large or MD Sedan Limousine must be designated as armored vehicles	Block
OC-1	Acquisition Cost	OC-1.1	Type: integer	Block
		OC-1.2	Minimum value: 0	Block
		OC-1.3	Maximum value: 3,000,000	Block
		OC-1.4	Must be specified, even if zero, for all vehicles	Block
		OC-1.5	In each year after the initial year of acquisition, must be equal to or greater than the Acquisition Cost (OC-1) reported the previous year	Flag
		OC-1.6	Must fall within reasonable ranges specified by vehicle class; acquisition cost for vehicles designated as leased vehicles in Ownership Type (OW-2) will only be checked against the corresponding maximum value: Sedans/St Wgns: 7,500 - 75,000 LSEVs: 5,000 - 30,000 Ambulances: 20,000 - 200,000 Buses: 10,000 - 450,000 LD 4x2: 7,500 - 40,000 LD 4x4: 10,000 - 90,000 MD: 12,500 - 120,000 HD: 30,000 - 500,000	Flag
OC-2 - OC-5	<i>Retired and removed as of Rev. 7</i>			

OC-6	Miles Traveled	OC-6.1	Type: integer	Block
		OC-6.2	Minimum value: 0	Block
		OC-6.3	Maximum value: 180,000	Block
		OC-6.4	Must be consistent with Fuel Volume (F-4): vehicles with zero total fuel consumption must report miles traveled less than specified maximum by vehicle weight class: Light Duty: 400 Medium Duty: 600 Heavy Duty: 1,000	Block
		OC-6.5	Must be consistent with Fuel Volume (F-4): vehicles with non-zero total fuel consumption must report miles traveled greater than zero	Flag
		OC-6.6	Must fall within reasonable ranges specified by vehicle class; lower limit will only be checked for vehicles in inventory 6 or more months of the year for which data is being reported: Sedans/St Wgns: 1,200 - 30,000 LSEVs: 300 - 8,000 Ambulances: 600 - 35,000 Buses: 1,200 - 60,000 LD 4x2: 1,200 - 30,000 LD 4x4: 1,200 - 40,000 MD: 600 - 40,000 HD: 300 - 50,000	Flag
OC-7	Lease Cost	OC-7.1	Type: integer	Block
		OC-7.2	Minimum value: 0	Block
		OC-7.3	Maximum value: 125,000	Block
		OC-7.4	Must be zero or omitted for any vehicle designated as an owned vehicle in Ownership Type (OW-2); must be explicitly reported, even if zero, for any leased vehicle	Block
		OC-7.5	Must fall within reasonable specified ranges by vehicle class; lower limit will only be checked for leased vehicles in inventory 6 or more months of the year for which data is being reported: Sedans/St Wgns: 1,500 - 15,000 LSEVs: 1,800 - 3,500 Ambulances: 1,200 - 60,000 Buses: 5,000 - 70,000 LD 4x2: 1,200 - 15,000	Flag

			LD 4x4: 1,800 - 20,000 MD: 1,500 - 20,000 HD: 1,200 - 40,000	
OC-8	Maintenance Cost	OC-8.1	Type: integer	Block
		OC-8.2	Minimum value: 0	Block
		OC-8.3	Maximum value: 150,000	Block
		OC-8.4	Must fall within reasonable specified ranges by vehicle class; lower limit will only be checked for vehicles in inventory 6 or more months of the year for which data is being reported. In addition, lower reasonability limits will not be applied to GSA-leased vehicles or vehicles reported with Vehicle Fuel Type/Configuration (A-7) as ELE DE: Sedans/St Wgns: 50 - 3,500 LSEVs: (n/a) - 7,000 Ambulances: 100 - 10,000 Buses: 100 - 15,000 LD 4x2 (all agencies except USPS): 50 - 4,000 LD 4x2 (USPS): 500 - 13,500 LD 4x4: 50 - 6,500 MD: 100 - 8,000 HD: 100 - 30,000	Flag
OC-9	Accident Repair Cost	OC-9.1	Type: integer	Block
		OC-9.2	Minimum value: 0	Block
		OC-9.3	Maximum value: 250,000	Block
		OC-9.4	Maximum reasonable value: 50% of Acquisition Cost (OC-1); accident repair costs will only be checked against this limit for vehicles designated as agency owned in Ownership Type (OW-2) and with Acquisition Cost (OC-1) greater than \$5,000	Flag
OC-10	Indirect Cost	OC-10.1	Type: integer	Block
		OC-10.2	Minimum value: 10	Block
		OC-10.3	Maximum value: 4,000	Block
		OC-10.4	Must fall within reasonable range of \$47 (10% of GSA guideline for indirect cost) to \$1,872 (4 times GSA guidance figure of \$468/year); upper limit will only be checked for vehicles in inventory 3 or more months of the year for which data is being reported.	Flag
OC-11	Disposal Cost	OC-11.1	Type: integer	Block

		OC-11.2	Minimum value: 0	Block
		OC-11.3	Maximum value: 10,000	Block
		OC-11.4	Must be specified, even if zero, for year of disposal from Disposal Date (OW-4)	Block
		OC-11.5	Must be zero or omitted in years prior to year of disposal from Disposal Date (OW-4)	Block
		OC-11.6	Maximum reasonable value: 1,500	Flag
OC-12	Disposal Proceeds	OC-12.1	Type: integer	Block
		OC-12.2	Minimum value: 0	Block
		OC-12.3	Maximum value: 1,000,000	Block
		OC-12.4	Must be reported, even if zero, for vehicles designated as owned vehicles (AO) in Ownership Type (OW-2) for year of disposal from Disposal Date (OW-4)	Block
		OC-12.5	Must be zero or omitted for vehicles designated as owned vehicles (AO) in Ownership Type (OW-2) for years prior to year of disposal from Disposal Date (OW-4)	Block
		OC-12.6	Must be zero or omitted for all years for vehicles designated as leased vehicles in Ownership Type (OW-2)	Block
		OC-12.7	Maximum reasonable value: Acquisition Cost (OC-1); disposal proceeds will not be checked against this limit for vehicles with Acquisition Cost specified as zero	Flag
		OC-12.8	Minimum reasonable value: Disposal Cost (OC-11). (This rule is not enforced for vehicles designated as leased vehicles in Ownership Type [OW-2].)	Flag
F-1	Fuel Location	F-1.1	Type: enumeration; must match one the U.S. Postal Service abbreviations for the 50 states or one of the following values: DC (District of Columbia) PR (Puerto Rico) OT (Other U.S. Territories) FO (Foreign)	Block
		F-1.2	Must be consistent with Garage - Domestic (A-8): only foreign vehicles can report foreign fuel consumption	Block

F-2	Fuel Type	F-2.1	Type: enumeration; must match one of the following values: B100 (Pure biodiesel) B20 (20% biodiesel/diesel blend) CNG (Compressed natural gas) DSL (Diesel) E85 (85% ethanol/gasoline blend) ELE (Electricity) GAS (Gasoline) HYD (Hydrogen) LNG (Liquefied natural gas) LPG (Liquefied petroleum gas) R100 (Renewable diesel)	Block
		F-2.2	Must be consistent with Vehicle Fuel Type/Configuration (A-7): must identify a fuel type which can be consumed in the vehicle's fuel type/configuration	Flag
		F-2.3	Must report non-zero DSL consumption if reporting B100 consumption greater than zero. Rule will only be applied to vehicles which are capable of consuming B100 fuel.	Flag
		F-2.4	Must report non-zero ELE consumption if total fuel consumption is greater than zero and Vehicle Fuel Type/Configuration (A-7) designates a plug-in hybrid (PH) configuration.	Flag
F-3	Fuel Units	F-3.1	Type: enumeration; must match one of the following values: GGE (Gasoline gallon equivalents) GAL (Gallons) GAL@2400 (Gallons at 2,400 PSI) GAL@3000 (Gallons at 3,000 PSI) GAL@3600 (Gallons at 3,600 PSI) HF3 (Hundred cubic feet) KWH (Kilowatt hours) KG (Kilograms)	Block
		F-3.2	Must be consistent with Fuel Type (F-2): specified fuel units must be valid for the specified fuel type, as defined in FAST. See Appendix C for valid combinations of fuel types and fuel units.	Block
F-4	Fuel Volume	F-4.1	Type: integer	Block
		F-4.2	Minimum value: 0	Block
		F-4.3	Maximum value: 45,000	Block
		F-4.4	Must be consistent with Miles Traveled (OC-6):	Block

			<p>vehicles with zero miles traveled must report total fuel consumption less than maximums specified by weight class:</p> <p>LD vehicles: 50 GGE's MD vehicles: 120 GGE's HD vehicles: 350 GGE's</p>	
		F-4.5	<p>Must be consistent with Miles Traveled (OC-6): vehicles with non-zero miles traveled must report total fuel consumption greater than zero</p>	Flag
		F-4.6	<p>Must fall within reasonable range in combination with Miles Traveled (OC-6). Calculated fuel efficiency based on total fuel volume and miles traveled must fall within expected vehicle class-based ranges listed below, with the following two exceptions: (1) this rule is not applied to LSEV's and (2) all plug-in hybrid and dedicated electric vehicles will use only an upper reasonability limit of 200 miles per GGE (mpGGE).</p> <p>Sedans/St Wgns: 10 - 50 Ambulances: 3 - 30 Buses: 2 - 25 LD 4x2 (all agencies except USPS): 8 - 35 LD 4x2 (USPS): 4 - 25 LD 4x4: 8 - 35 MD: 3 - 30 HD: 2 - 20</p>	Flag
F-5	Fuel Cost	F-5.1	Type: integer	Block
		F-5.2	Minimum value: 0	Block
		F-5.3	Maximum value: 500,000	Block
		F-5.4	<p>Must be consistent with Fuel Volume (F-4):</p> <p>If Fuel Volume (F-2) is reported as zero, fuel costs must be reported as zero.</p> <p>For vehicles designated as "wet lease" in Ownership Type (OW-2), fuel costs should be reported as zero except for cost of fuel purchased outside of the lease agreement or cost associated with consumption of electricity (based on Fuel Type [F-2]). Fuel costs for electricity consumed in vehicles with wet-lease agreements must be reported as actual (non-zero) cost unless cost of electricity is specifically included within the lease cost for the vehicle. Fuel costs for fuel consumed and purchased/paid for as part of the wet-lease agreement should be reported as zero. Fuel costs</p>	Flag

			<p>for any non-zero fuel volume purchased/paid for outside of the wet-lease agreement should be reported as actual (non-zero) cost.</p> <p>For vehicles designated as agency-owned or “dry lease” in Ownership Type (OW-2), fuel costs for non-zero fuel volumes should be reported as actual (non-zero) cost for all fuel types.</p>	
		F-5.5	<p>Average fuel cost/GGE (calculated based on Fuel Cost [F-5], divided by Fuel Volume [F-4]) should fall within an expected range of \$1.00 - \$4.50/GGE. Reasonability range applied for this rule may be adjusted from year to year based on fluctuations in domestic fuel costs. Upper and lower reasonability limits will be applied to cost of fuel consumed in owned and dry lease vehicles as well as the upper reasonability limit will be applied to cost of fuel consumed in wet lease vehicles. This check will not be applied to vehicles designated as foreign-based due to the widely varying costs of fuel abroad.</p>	Flag
F-6	Fuel Comment	F-6.1	Type: text string with a maximum of 64 characters (element may be omitted)	Block
AP-1	FY	AP-1.1	Type: integer	Block
		AP-1.2	Minimum value: report year + 1	Block
AP-2	Ownership Type	AP-2.1	<p>Type: enumeration; must match one of the following values:</p> <p>A0 (Agency-owned) CL (Commercial lease) GL (GSA lease)</p>	Block
AP-3	Vehicle Type	AP-3.1	<p>Type: enumeration; must match one of the following values:</p> <p>Low-speed Vehicle Sedan/St Wgn Subcompact Sedan/St Wgn Compact Sedan/St Wgn Midsize Sedan/St Wgn Large Sedan Limousine LD SUV 4x2 LD SUV 4x4 LD Minivan 4x2 (Passenger) LD Minivan 4x2 (Cargo) LD Minivan 4x4 (Passenger) LD Minivan 4x4 (Cargo) LD Van 4x2 (Passenger) LD Van 4x2 (Cargo)</p>	Block

			LD Van 4x4 (Passenger) LD Van 4x4 (Cargo) LD Pickup 4x2 LD Pickup 4x4 LD Ambulance LD Other 4x2 MD Sedan/St Wgn Large MD Sedan Limousine MD SUV MD Van (Passenger) MD Van (Cargo) MD Pickup MD Ambulance MD Bus MD Other Ambulance (** see note below) HD HD Ambulance HD Bus ** Value Ambulance has been deprecated for FY 2018 reporting and will be retired at a future date. Reporting organizations should transition to the equivalent MD Ambulance vehicle type.	
AP-4	Vehicle Fuel Type/Configuration	AP-4.1	Type: enumeration; must match one of the following values: CNG DE DSL DE DSL HY DSL/CNG BI DSL/ELE PH DSL/LNG BI ELE DE GAS DE GAS HY GAS/CNG BI GAS/E85 FF GAS/ELE PH GAS/LNG BI GAS/LPG BI HYD DE LPG DE	Block
		AP-4.2	Must be consistent with Vehicle Type (AP-3): vehicle type and fuel type/configuration combination must match a combination defined as being available in FAST	
AP-5	Garage - Domestic	AP-5.1	Type: enumeration; if specified, must match one of the following values (if omitted, value of YES will be assumed):	Block

			NO (vehicles are located in an area considered foreign for FAST reporting) YES (vehicles are located in an area considered domestic for FAST reporting)	
AP-6	Law Enforcement Designation	AP-6.1	Type: enumeration; if specified, must match one of the following values (if omitted, value of NO will be assumed): NO (Vehicles are not LE vehicles) YES (Vehicles are LE vehicles consistent with FAST reporting guidance)	Block
		AP-6.2	Must be consistent with Vehicle Type (AP-3): see Appendix B for vehicle types which can be designated as LE vehicles	Block
AP-7	Emergency Response Designation	AP-7.1	Type: enumeration; if specified, must match one of the following values (if omitted, value of NO will be assumed): NO YES	Block
		AP-7.2	Must be consistent with Vehicle Type (AP-3): see Appendix B for vehicle types which can be designated as ER vehicles	Block
		AP-7.3	Must be consistent with Law Enforcement Designation (AP-6): vehicles cannot be designated as both LE and ER vehicles	Block
AP-8	Armored Designation	AP-8.1	Type: enumeration; if specified, must match one of the following values (if omitted, value of NO will be assumed): NO YES	Block
AP-9	Quantity	AP-9.1	Type: integer	Block
		AP-9.2	Minimum value: 0	Block
		AP-9.3	Maximum value: 20,000	Block
AP-10	Acquisition Costs	AP-10.1	Type: integer	Block
		AP-10.2	Minimum value: 0	Block
		AP-10.3	Maximum value: 3,000,000 per vehicle	Block
		AP-10.4	Must be consistent with acquisition Quantity (AP-9): if Quantity (AP-9) is zero, Acquisition Costs (AP-10) must be omitted or reported as zero	Block

		AP-10.5	<p>Must fall within reasonable per-vehicle ranges specified by vehicle class; acquisition cost for vehicles designated as leased vehicles in Ownership Type (AP-2) will only be checked against the corresponding maximum value:</p> <p>Sedans/St Wgns: 10,000 - 75,000 LSEVs: 10,000 - 30,000 Ambulances: 20,000 - 350,000 Buses: 30,000 - 450,000 LD 4x2: 10,000 - 40,000 LD 4x4: 10,000 - 90,000 MD: 15,000 - 120,000 HD: 30,000 - 750,000</p>	Flag
AP-11	Agency Budget Element Code	AP-11.1	Type: text string with a maximum of 32 characters	Block
		AP-11.2	Content: alphabetic or dash ("-") characters	Block
		AP-11.3	If specified, must match exactly one existing budget element code for the reporting agency	Block
		AP-11.4	If omitted, agency must have exactly one defined budget element code (which will be used as the default)	Block
AP-12	Agency Sort Field	AP-12.1	Type: text string with a maximum of 64 characters (element may be omitted)	Block
		AP-12.2	Content: alphanumeric characters, space, or special characters (e.g., punctuation), excluding quotes and apostrophes	Block
AP-13	Comment	AP-13.1	Type: text string with a maximum of 64 characters (element may be omitted)	Block
DP-1	FY	DP-1.1	Integer	Block
		DP-1.2	Minimum value: report year + 1	Block
DP-2	Ownership Type	DP-2.1	<p>Type: enumeration; must match one of the following values:</p> <p>A0 (Agency-owned) CL (Commercial lease) GL (GSA lease)</p>	Block
DP-3	Vehicle Type	DP-3.1	<p>Type: enumeration; must match one of the following values:</p> <p>Low-speed Vehicle Sedan/St Wgn Subcompact Sedan/St Wgn Compact Sedan/St Wgn Midsize</p>	Block

			Sedan/St Wgn Large Sedan Limousine LD SUV 4x2 LD SUV 4x4 LD Minivan 4x2 (Passenger) LD Minivan 4x2 (Cargo) LD Minivan 4x4 (Passenger) LD Minivan 4x4 (Cargo) LD Van 4x2 (Passenger) LD Van 4x2 (Cargo) LD Van 4x4 (Passenger) LD Van 4x4 (Cargo) LD Pickup 4x2 LD Pickup 4x4 LD Ambulance LD Other 4x2 MD Sedan/St Wgn Large MD Sedan Limousine MD SUV MD Van (Passenger) MD Van (Cargo) MD Pickup MD Ambulance MD Bus MD Other Ambulance HD HD Ambulance HD Bus ** Value Ambulance has been deprecated for FY 2018 reporting and will be retired at a future date. Reporting organizations should transition to the equivalent MD Ambulance vehicle type.	
DP-4	Vehicle Fuel Type/Configuration	DP-4.1	Type: enumeration; must match one of the following values: CNG DE DSL DE DSL HY DSL/CNG BI DSL/ELE PH DSL/LNG BI ELE DE GAS DE GAS HY GAS/CNG BI GAS/E85 FF GAS/ELE PH GAS/LNG BI GAS/LPG BI HYD DE	Block

			LPG DE	
		DP-4.2	Must be consistent with Vehicle Type (DP-3): vehicle type and fuel type/configuration combination must match a combination defined as being available in FAST	Block
DP-5	Garage - Domestic	DP-5.1	Type: enumeration; if specified, must match one of the following values (if omitted, value of YES will be assumed): NO (vehicles are located in an area considered foreign for FAST reporting) YES (vehicles are located in an area considered domestic for FAST reporting)	Block
DP-6	Law Enforcement Designation	DP-6.1	Type: enumeration; if specified, must match one of the following values (if omitted, value of NO will be assumed): NO (Vehicles are not LE vehicles) YES (Vehicles are LE vehicles consistent with FAST reporting guidance)	Block
		DP-6.2	Must be consistent with Vehicle Type (DP-3): see Appendix B for vehicle types which can be designated as LE vehicles	Block
DP-7	Emergency Response Designation	DP-7.1	Type: enumeration; if specified, must match one of the following values (if omitted, value of NO will be assumed): NO YES	Block
		DP-7.2	Must be consistent with Vehicle Type (DP-3): see Appendix B for vehicle types which can be designated as ER vehicles	Block
		DP-7.3	Must be consistent with Law Enforcement Designation (DP-6): vehicles cannot be designated as both LE and ER vehicles	Block
DP-8	Armored Designation	DP-8.1	Type: enumeration; if specified, must match one of the following values (if omitted, value of NO will be assumed): NO YES	Block
DP-9	Quantity	DP-9.1	Type: integer	Block
		DP-9.2	Minimum value: 0	Block

		DP-9.3	Maximum value: 20,000	Block
DP-10	Average Vehicle Age	DP-10.1	Type: integer	Block
		DP-10.2	Minimum value: 0	Block
		DP-10.3	Maximum value: 480	Block
		DP-10.4	Must be specified for vehicles designated as owned vehicles (AO) in Ownership Type (DP-2)	Block
		DP-10.5	Must be zero or omitted for vehicles designated as leased vehicles (GL or CL) in Ownership Type (DP-2)	Block
DP-11	Disposal Proceeds	DP-11.1	Type: integer	Block
		DP-11.2	Minimum value: 0	Block
		DP-11.3	Maximum value: 1,000,000 per vehicle	Block
		DP-11.4	Must be specified for vehicles designated as owned vehicles (AO) in Ownership Type (DP-2)	Block
		DP-11.5	Must be specified as zero or be omitted for vehicles designated as leased vehicles (GL or CL) in Ownership Type (DP-2)	Block
		DP-11.6	Must be consistent with disposal Quantity (DP-9): if Quantity is zero, Disposal Proceeds must be omitted or reported as zero	Block
		DP-11.7	Must be below reasonable per-vehicle amounts specified by vehicle class: Sedans/St Wgns: 35,000 LSEVs: 15,000 Ambulances: 175,000 Buses: 225,000 LD 4x2: 35,000 LD 4x4: 45,000 MD: 60,000 HD: 375,000	Flag
DP-12	Agency Budget Element Code	DP-12.1	Type: text string with a maximum of 32 characters	Block
		DP-12.2	Content: alphabetic or dash ("-") characters	Block
		DP-12.3	If specified, must match exactly one existing budget element code for the reporting agency	Block
		DP-12.4	If omitted, agency must have exactly one defined budget element code (which will be used as the default)	Block

DP-13	Agency Sort Field	DP-13.1	Type: text string with a maximum of 64 characters (element may be omitted)	Block
		DP-13.2	Content: alphanumeric characters, space, or special characters (e.g., punctuation), excluding quotes and apostrophes	Block
DP-14	Comment	DP-14.1	Type: text string with a maximum of 64 characters (element may be omitted)	Block
CP-1	FY	CP-1.1	Integer	Block
		CP-1.2	Minimum value: report year + 1	Block
CP-2	Ownership Type	CP-2.1	Type: enumeration; must match one of the following values: A0 (Agency-owned) CL (Commercial lease) GL (GSA lease)	Block
CP-3	Fleet Segment	CP-3.1	Type: enumeration; must match one of the following values: FLEET (Entire fleet; i.e., all vehicles) LE (all LE vehicles in the fleet) ER (all ER vehicles in the fleet) ARMORED (all armored vehicles in the fleet)	Block
CP-4	Operating Costs	CP-4.1	Type: integer	Block
		CP-4.2	Minimum value: 0	Block
CP-5	Agency Budget Element Code	CP-5.1	Type: text string with a maximum of 32 characters	Block
		CP-5.2	Content: alphabetic or dash ("-") characters	Block
		CP-5.3	If specified, must match exactly one existing budget element code for the reporting agency	Block
		CP-5.4	If omitted, agency must have exactly one defined budget element code (which will be used as the default)	Block
CP-6	Agency Sort Field	CP-6.1	Type: text string with a maximum of 64 characters (element may be omitted)	Block
		CP-6.2	Content: alphanumeric characters, space, or special characters (e.g., punctuation), excluding quotes and apostrophes	Block
CP-7	Comment	CP-7.1	Type: text string with a maximum of 64 characters (element may be omitted)	Block
PD-1	Year: Designation of	PD-1.1	Type: integer	Block

	the fiscal year for which data within the file is being reported.	PD-1.2	Minimum value: 2016	Block
		PD-1.3	Maximum value: Latest FAST reporting year	Block
PD-2	Processing: Designation of how the data within the XML file is to be processed.	PD-2.1	Type: enumeration; must match one of the following values: VALIDATE-ONLY IMPORT	Block
		PD-2.2	Must be consistent with the agency's current complete/incomplete submission status in FAST for the data call corresponding to Dataset (PD-4) and Year (PD-1): if specified as IMPORT, the agency's relevant submission status must indicate that the agency's submission is incomplete.	Block
PD-3	Existing Data Handling: Designation of how the data within the XML file is to be processed in conjunction with any existing data already present within the destination system for all fleets identified by "Fleet" elements within the XML file.	PD-3.1	Type: enumeration; must match one of the following values: PURGE APPEND-FAIL-IF-DUPES APPEND-REPLACE-DUPES APPEND	Block
		PD-3.2	Must be consistent with Dataset (PD-4): if Dataset (PD-4) designates VEHICLES, must be PURGE, APPEND-FAIL-IF-DUPES, or APPEND-REPLACE-DUPES. If Dataset (PD-4) designates PROJECTIONS, must be either PURGE or APPEND.	Block
PD-4	Dataset: Designation of the type of data within the XML file to be processed.	PD-4.1	Type: enumeration; must match one of the following values (if omitted, a value of VEHICLES will be assumed): VEHICLES PROJECTIONS	Block
		PD-4.2	If Dataset (PD-4) designates VEHICLES, FAST "Actual Fleet Data" data call must be open for reporting for the designated year (Year [PD-1]) for the reporting agency.	Block
		PD-4.3	If Dataset (PD-4) designates VEHICLES, no fleet within the XML file being processed may contain projections. This is an XML-specific rule and does not apply to Excel files.	Block
		PD-4.4	If Dataset (PD-4) designates PROJECTIONS, either the FAST "Forecast Fleet Data" or the "Fleet Budget Data" data call must be open for reporting	Block

			for the designated year (Year [PD-1]) for the reporting agency.	
		PD-4.5	If Dataset (PD-4) designates PROJECTIONS, no fleet within the XML file being processed may contain vehicles. This is an XML-specific rule and does not apply to Excel files.	Block
OR	Other Rules (not related to a specific data element)	OR-1	Each vehicle must have one or more fuel consumption entries (elements F1 through F5).	Block
		OR-2	Data for a given fiscal year can only be reported in FAST in either the new VLD format or the old aggregated format. Both data formats cannot be used within the same agency hierarchy in the same fiscal year.	Block

Revision History

Revision	Date	Revision Description
0	02/24/2016	Initial release.
1	04/08/2016	<p>Overview: Added clarification noting that all data elements are required unless specifically stated otherwise.</p> <p>Abbreviations: Added “DOE”, “GGE”.</p> <p>General change: Clarification within many rules, using term “omitted” (e.g., “Must be omitted...”, “if omitted”) to identify elements which may be omitted or must be omitted in certain contexts. Clarifications within some elements which may be omitted, identifying default values.</p> <p>Rule A-1.4: Inclusion of S-1 in list of elements to be examined for flagging of year-to-year changes.</p> <p>Rule A-6.1: Clarification of use of sub-compact vehicle type.</p> <p>Elements A-8, AP-5, DP-5: Shortened enumerations for foreign (FOR) and domestic (DOM) designations.</p> <p>Element A-9: Added New element “Location Withheld” as A-9 and supporting business rules A-9.1, A-9.2, A-9.3, A-10.4, A-11.6; re-sequenced following elements and any rules impacted by additions.</p> <p>Added elements A-11.9 and A-12.9 to specify expected precision of latitude/longitude elements.</p> <p>Elements S-8, AP-8, DP-8: Elements renamed “Armored Designation” for consistency with change from collecting armor level to just collecting whether vehicle is/is not armored.</p> <p>Rules S-4.2, OW-1.2, F-4.4: Updated descriptions for clarity and/or consistency.</p> <p>Element S-5: Updated element title for consistency with VLD Data Element Reference.</p> <p>Rules S-1.1, S-2.1, S-4.1, S-6.1, S-8.1, AP-6.1, AP-8.1, DP-6.1, DP-8.1: Updated set of available choices and their descriptions.</p> <p>Rule OW-4.1: Removed enumeration HTW.</p> <p>Rule OW-5.1: Updated several enumeration values for consistency and brevity.</p> <p>Rule OC-12.7: Clarification of reporting as zero or omitting.</p>

		<p>Rule F-5.4: New rule to clarify handling of wet-lease fuel costs.</p> <p>Rule F-5.5: Clarification of use of fuel cost/GGE in validating reasonableness of fuel costs.</p> <p>Rule OR-1 (was OT-1.1): Replaced duplicate rule (already present as OW-4.4) with new rule requiring presence of one or more fuel entries per vehicle and moved below rules associated with specific data elements.</p> <p>Elements AP-10, AP-11, AP-12: Updated rule IDs to reflect correct element IDs.</p> <p>Elements A-13, A-14, AP-11, AP-12, DP-11, DP-12, CP-5, CP-6: Updated rules identifying allowable content for these elements.</p>
2	04/18/2016	<p>Title pages now include the day (e.g., "April 18, 2016") within the date of the revision.</p> <p>Rule OW-5.1: Enumeration value in previous revision was specified as "AO-NOT-REPL-"; that element has been corrected to remove the trailing dash.</p> <p>Elements A-8, AP-5, DP-5: Changed title from "Garage - Foreign/Domestic" to simplify naming and designation.</p> <p>Rules A-8.1, AP-5.1, DP-5.1: Updated rule descriptions and changed enumerations to use simpler "NO/YES" as to whether vehicle is domestic.</p> <p>Rules A-9.2, S-1.3, S-2.3, S-5.2, F-1.2: Updated references to element A-8 to reflect new element name.</p>
3	05/12/2016	<p>Rules FL-1.3, FL-1.4, FL-2.3, A-1.3, A-1.4, A-3.3: Updated descriptions for clarity and/or consistency.</p> <p>Rule FL-3.2: Removed due to its redundancy with FL-3.3 (now FL-3.2).</p> <p>Rules A-1.2, A-3.2: Added rule disallowing content to be empty or blank; re-sequenced following elements and any rules impacted by additions.</p> <p>Rule A-1.5: Corrected reference to Model Year (A-4) in the list of vehicle attributes which should not change from year to year.</p> <p>Rules A-6.2 and A-6.3: Updated A-6.2 to deal with specific exception for LD truck definition from 40 CFR 86.082-2; added rule A-6.3 to flag vehicles which may have been reported as MD Other vehicles under that exception.</p> <p>Rule A-9.2: Corrected designation of rule (was A-9-2).</p>

		<p>Rules OW-5.1, OW-5.2, OW-5.3: Added N/A enumeration for non-disposed vehicles in OW-5.1, designation of N/A as the default value for OW-5, and incorporation of that additional value into description of rules OW-5.2 and OW-5.3.</p> <p>Rules DP-13.1, DP-13.2: Corrected rule identifier.</p> <p>Rules FL-4.1, A-15.1, F-6.1, AP-13.1, DP-14.1, CP-7.1: Added rule identifying length restriction and possibility of omitting each “comment” data element.</p> <p>Rules F-2.1, F-3.1: Updated enumerated lists to change how CNG at different pressures is reported. Now unit is different instead of fuel type.</p> <p>Appendix A: Additional vehicle manufacturers per agency requests.</p>
4	06/21/2016	<p>General change: Many rule descriptions edited for clarity and specificity.</p> <p>Rule S-1.1: Editorial change to rule description for clarity of EX-GEO and EX-NONMSA entries.</p> <p>Rule S-3.2: Deleted superfluous rule and re-sequenced following rule for element S-3.</p> <p>Rule OC-1.6: Clarification that acquisition costs for leased vehicles will only be checked against vehicle class-specific upper range limits.</p> <p>Rule OC-4.4: Minor editorial correction.</p> <p>Rule OC-8.4: Clarification that maintenance costs for vehicles leased from GSA Fleet will only be checked against vehicle class-specific upper range limits.</p> <p>Rule AP-10.4: Deleted superfluous rule and re-sequenced following rules for element AP-10.</p> <p>New rule AP-10.4 (was AP-10.5): Clarification that acquisition costs for leased vehicles will only be checked against vehicle class-specific upper range limits.</p> <p>Appendix A: Additional vehicle manufacturers per agency requests.</p> <p>Appendix B: New appendix identifying allowed LE and ER designations for each vehicle type.</p>
5	08/22/2016	<p>Rule A-1.5: Correction of reference to EPA Act Coverage Designation (S-1).</p> <p>Element AP-5: Correction in name of data element.</p> <p>Appendix A: Additional vehicle manufacturers per agency requests.</p>

		<p>OR-1: Minor editorial change to wording of rule.</p> <p>FL-1.5: Addition of new rule.</p> <p>OR-2: Addition of new rules.</p> <p>New PD section to describe rules related to Processing Directives (PD) which control processing of import files, including new rules for Year (PD-1.1), Processing (PD-2.1), Existing Data Handling (PD-3.1, PD-3.2), and Dataset (PD-4.1 - PD-4.5).</p> <p>OC-9, OC-10: Minor wording edits to clarify reporting period covered by each data element.</p> <p>Section F Note: Minor wording edits to clarify reporting period covered by each data element; clarification for handling of vehicles with no fuel consumption.</p>
6	11/04/2016	<p>OC-6.5: Addition of new rule, and re-sequenced previous rule OC-6.5 to become OC-6.6.</p> <p>F-2.1: Addition of R100 as valid fuel type.</p> <p>F-4.4: Changed from blocking to flagging rule.</p>
7	03/16/2017	<p>A-6.1, AP-3.1, DP-3.1: Added new vehicle types (MD Sedan/St Wgn Large, MD Limousine, LD Ambulance).</p> <p>A-11.2 and A-11.3: Minor wording edits for clarity of limits on latitude values.</p> <p>S-3.1 - S-3.5: Clarification of rule wording; additional enumeration value GLR to identify GSA leased reassigned vehicles; additional rules to account for new enumeration value and for pre-2011 model year vehicles designated as N/A.</p> <p>S-8.2: Addition of new rule.</p> <p>OC-1.4: Changed wording to widen requirement to all years, not just year of acquisition.</p> <p>OC-1.5: Changed rule content based on change to definition of Acquisition Cost (OC-1).</p> <p>OC-2 - OC-5: In conjunction with deleting depreciation-related data elements, removed all rules related to the following data elements - Capitalized Item (OC-2), Salvage Percent (OC-3), Useful Life (OC-4), and Depreciation Cumulative (OC-5).</p> <p>OC-8.3: Changed upper limit for annual maintenance costs, per agency feedback.</p> <p>OC-10.4: Merged with OC-10.5; reworded to make more consistent with language of other range-based flagging rules.</p>

		<p>OC-10.5: Merged with OC-10.4.</p> <p>F-4.5: Changed wording to clarify that this check is based on miles per GGE, not gallons.</p> <p>Appendix A: Additional vehicle manufacturer(s) per agency requests.</p> <p>Revision History: Minor editing for consistency.</p>
8	07/10/2017	<p>FL-1.3: Added support for slash character in fleet abbreviation.</p> <p>A-1.5: Removed Acquisition Cost (OC-1) from the list of vehicle attributes checked by this rule, for consistency with OC-1.5.</p> <p>A-4.3: Changed rule to allow model year range check based on vehicle class.</p> <p>A-6.1, S-8.2, AP-3.1, DP-3.1: Correction of MD Sedan Limousine vehicle type for consistency.</p> <p>A-7.1, AP-4.1, DP-4.1: Added DSL/ELE PH as supported value for each Vehicle Fuel Type/Configuration attribute.</p> <p>OW-1.3: Editorial change for wording consistency with rule OW-1.4.</p> <p>S-2.3: Minor formatting change.</p> <p>S-2.5: Minor wording change to clarify when vehicles may be designated with each of the possible enumeration values.</p> <p>S-8.2: Clarified that rule is a blocking rule (explicit designation was omitted in Revision 6, when the rule was originally published).</p> <p>OC-6.4, OC-6.5: Changed OC-6.5 (was OC-6.4) to a flagging rule and re-sequenced these two rules for consistency.</p> <p>OC-11.4, OC-11.5, and OC-11.6: Re-sequenced blocking and flagging rules for consistency.</p> <p>OC-12.4, OC-12.5, OC-12.6, OC-12.7: Re-sequenced blocking and flagging rules for consistency.</p> <p>F-4.4: New blocking rule addressing situations with zero-mileage vehicles and small fuel consumption volumes; re-sequenced previous F-4.5 and F-4.6 to accommodate new rule.</p> <p>Appendix A: Additional vehicle manufacturers per agency requests.</p> <p>Appendix B: Correction of MD Sedan Limousine vehicle type for consistency.</p>
9	09/25/2017	<p>General Change: Minor editing for consistency and formatting.</p>

		<p>A-3.3: Added support for slash (/) character as a valid character within the value for Vehicle Model (A-3).</p> <p>A-5.3: Increased maximum value allowed for GVWR to 100,000.</p> <p>A-5.4: New flagging rule to identify vehicles reporting GVWR greater than 80,000.</p> <p>A-6.1, AP-3.1, DP-3.1, Appendix B: Added new vehicle type HD Ambulance.</p> <p>OW-5.1: Corrected misspelling in rule description.</p> <p>S-3.1: Expanded description of EISA 2007 Section 141 designation GLR for clarity regarding when that designation should be used</p> <p>S-3.5, S-3.6: Added new blocking rule S-3.5 covering consistency of EISA 2007 Section 141 designation NMD and A-5, GVWR. Re-sequenced flagging rule to become S-3.6.</p> <p>F-2.2: Rule changed from a blocking rule to a flagging rule.</p> <p>Appendix A: Additional vehicle manufacturers per agency requests; formatting change.</p> <p>Appendix C: Added appendix to provide valid fuel type/fuel unit combinations supported by FAST.</p>
10	03/26/2018	<p>A-7.1, AP-4.1, DP-4.1: Added DSL/LNG BI as a supported fuel type/configuration.</p> <p>OC-1.3: Increased upper limit on acquisition cost to 2,500,000.</p> <p>OC-6.3: Increased upper limit on Miles to 180,000.</p> <p>OC-7.3: Increased upper limit on Lease Cost to 125,000.</p> <p>OC-10.3: Increased upper limit on Indirect Cost to 4,000.</p> <p>F-4.3: Increased upper limit on Fuel Volume to 45,000.</p> <p>PD-2.2: Added new blocking rule to ensure data cannot be imported after an agency's submission has been designated as complete.</p> <p>PD-4.3, PD-4.5: Clarification in rule description that these are XML-specific rules and do not apply data imported via Microsoft Excel files.</p> <p>Appendix A: Additional vehicle manufacturers per agency requests.</p>
11	08/08/2018	<p>General change: Minor editing for appearance and consistency.</p> <p>A-1.5: Revised rule to no longer include element S-4, EO 13693 Designation.</p>

		<p>A-4.4: Revised rule to use a weight class-specific threshold.</p> <p>A-6.1, AP-3.1, DP-3.1: Addition of MD Ambulance vehicle type, and indication of depreciation of existing Ambulance vehicle type.</p> <p>A-9.3: Revised rule to no longer include designation as a vehicle exempted by the head of the agency from EO 13693 (S-4).</p> <p>A-10.5: Revised rule to describe support for ZIP codes assigned to specific organizations or locations.</p> <p>S-4, S-4.1: Note added to data element indicating its depreciation for FY 2018 and later reporting. Note added to rule indicating its pending retirement for FY 2020 reporting.</p> <p>OC-1.3: Increased upper limit on acquisition cost to 3,000,000.</p> <p>OC-1.6: Revised reasonability ranges for Acquisition Cost for most vehicle classes.</p> <p>OC-6.6: Revised reasonability ranges for Miles Traveled; revised rule to apply lower reasonability threshold to vehicles in inventory 6 or more months of the reporting year.</p> <p>OC-7.4: Revised the rule description to state that lease cost must be explicitly reported, even if zero, for leased vehicles. Modified the implementation to reflect this change.</p> <p>OC-7.5: Revised reasonability ranges for Lease Cost; revised rule to apply lower reasonability threshold to leased vehicles in inventory 6 or more months of the reporting year.</p> <p>OC-8.4: Revised reasonability ranges for Maintenance Cost; revised rule to apply lower reasonability threshold to vehicles in inventory 6 or more months of the reporting year. In addition, lower reasonability limits will not be applied to GSA-leased vehicles or vehicles reported with A-7, Vehicle Fuel Type/Configuration of "ELE DE".</p> <p>OC-9.4: Revised maximum reasonable value to only apply to Agency Owned vehicles with reported acquisition costs (OC-1) greater than \$5,000.</p> <p>OC-10.4: Revised upper reasonability limit and revised implementation so that upper reasonability limit will only be applied to vehicles in inventory 3 or more months during the reporting year.</p> <p>OC-11.6: Increased upper limit on Disposal Cost to 1,500.</p> <p>OC-12.7: Revised rule to no longer flag vehicles where the disposal proceeds exceed Acquisition Cost (OC-1) if the reported acquisition cost is zero.</p> <p>OW-4: Changed element name from "Actual Disposal Date" to</p>
--	--	---

		<p>“Disposal Date”. This also was changed in OW-5.2, OW-5.3, OC-11.4, OC-11.5, OC-12.4, OC-12.5.</p> <p>F-2.3: New flagging rule for non-zero DSL consumption if reporting B100 consumption greater than zero. Rule will only be applied to vehicles which are capable of consuming B100 fuel.</p> <p>F-4.6: Revised rule description and implementation to better identify outliers.</p> <p>F-5.4: Revised rule description and implementation to handle non-zero fuel costs reported on wet lease vehicles; rule description and implementation revised to correctly flag zero fuel costs on non-zero fuel volumes reported for owned and dry lease vehicles.</p> <p>F-5.5: Revised rule description and implementation so that upper and lower reasonability limits are applied to the cost of fuel consumed in owned and dry lease vehicles, and so that only the upper reasonability limit are applied to the cost of fuel consumed in wet lease vehicles.</p> <p>S-4.2: Rule retired for FY 2018 and later reporting.</p> <p>AP-9 and DP-9: Increased upper limit on quantity of future-year vehicle acquisitions and disposals to 20,000.</p> <p>AP-10.4 and AP-10.5: Existing flagging rule AP-10.4 re-sequenced to AP-10.5. New blocking rule AP-10.4 added to ensure consistency of acquisition costs and acquisition quantity (AP-9).</p> <p>DP-11.6 and DP-11.7: Existing flagging rule DP-11.6 re-sequenced to DP-11.7. New blocking rule DP-11.6 added to ensure consistency of disposal proceeds and disposal quantity (DP-9).</p> <p>Appendix A: Additional vehicle manufacturer(s) per agency request.</p> <p>Appendix B: Addition of vehicle type MD Ambulance.</p>
12	04/29/2019	<p>A-11.2: Clarification in rule description for consistency of latitude specification as decimal degrees N latitude.</p> <p>F-3.2: Minor update to rule description for clarity.</p> <p>F-5.4: Corrected typographical error in rule description.</p> <p>Appendix A: Additional vehicle manufacturers per agency request.</p>
13	09/25/2019	<p>S-3.5: Rule description and implementation revised to address MD vehicle types with GVWR’s below 10,000 lbs but which do not meet the definition of a MD passenger vehicle from the EISA Section 141 guidance document based on passenger capacity (e.g., MD 12- and 15-passenger vans with GVWR in the range 8,500-9,999 lbs).</p> <p>AP-10.3: Revised upper limit on future-year acquisition cost per</p>

		<p>vehicle to \$3,000,000 for consistency with corresponding upper limit on OC-1, Acquisition Cost, per OC-1.3.</p> <p>Appendix A: Additional vehicle manufacturers per agency request.</p>
14	04/27/2020	<p>Abbreviations and Acronyms: Updated to include several missing entries.</p> <p>A-7.1: Rule description expanded to include definitions of engine configurations.</p> <p>CP-3.1: Rule description expanded to include description of each of the fleet segments used to specify cost projections.</p> <p>Appendix A: Additional vehicle manufacturers per agency request.</p>
15	10/01/2020	<p>A-1.5: Rule revised to no longer flag changes to GVWR (A-5) and to limit situations where changes to EISA Section 141 Designation (S-3) are flagged.</p> <p>A-4.4: Rule revised to no longer be evaluated for vehicles reported as disposed.</p> <p>S-2.1-5: Existing rules updated to reflect DOE's revised EPAAct 2005 Section 701 waiver request and compliance process.</p> <p>S-2.6: New rule implemented as part of DOE's revised EPAAct 2005 Section 701 waiver request and compliance process.</p> <p>S-4.1, S-4.2: Rules retired based on retirement of data element S-4.</p> <p>OC-12.8: Rule revised to no longer be evaluated for vehicles designated as leased vehicles.</p> <p>F-2.4: New flagging rule to identify vehicles with plug-in hybrid fuel configurations which do not report ELE fuel consumption.</p> <p>Appendix A: Additional vehicle manufacturer(s) per agency request.</p>

Appendix A - Vehicle Makes

Data element Make (A-2) must match one entry from the following set of supported vehicle makes or manufacturers. Agencies whose fleets contain vehicles from manufacturers not listed in this appendix should contact the FAST management team for guidance and/or inclusion of additional entries in this supported set.

ACURA	DONGFENG
AICHI	E-ONE
AIRSTREAM	E-RIDE
AIXAM	EAGLE (Eagle Bus)
ALEXANDER DENNIS	EICHER
ALFA ROMEO	ELDORADO
ALTEC	ELGIN
AM GENERAL	ENOVA
AMERTEK	ENTEGRA COACH
ARBOC	FAP
ASHOK LEYLAND (distinct from LEYLAND, below)	FERRARA
AUDI	FIAT
AUTOCAR	FORCE
BAE SYSTEMS	FORD
BENTLEY	FOREST RIVER
BLUE BIRD	FORLAND
BLUE DIAMOND	FREIGHTLINER
BMC	FTI (Fire Trucks Incorporated)
BME (Boise Mobile Equipment, primarily firetrucks)	FUSO
BMW	FWD (FWD Corporation, primarily firetrucks)
BMV	GARSITE
BRILLIANCE	GAZ
BRONTO	GEM (Global Electric Motorcars)
BUICK	GENERAL COACH
CADILLAC	GGT ELECTRIC
CAPACITY	GILLIG
CATERPILLAR	GLAVAL
CHAMPION	GMC (General Motors)
CHEVROLET	GOSHEN
CHRYSLER	GREENGO
CITROEN	GROVE
CLUB CAR	GRUMMAN
COLLINS	HINO
COLONIAL	HME (HME Incorporated, primarily firetrucks)
COLUMBIA PARCAR	HOLDEN
CRANE CARRIER	HONDA
CRUISE CAR	HUMMER
CUSHMAN	HYUNDAI
DACIA	IC BUS
DAEWOO	INFINITI
DAF	INTERNATIONAL (also used for International
DAIHATSU	Harvester)
DARLEY	ISOMETRICS
DODGE	ISUZU

IVECO
 JAC
 JAGUAR
 JEEP
 JERR-DAN
 JIANGLING
 KAISER
 KALMAR
 KAMAZ
 KENWORTH
 KIA
 KME (Kovatch Mobile Equipment)
 KRYSTAL
 LADA
 LANCIA
 LAND ROVER
 LENCO
 LEXUS
 LEYLAND
 LINCOLN
 LINK-BELT
 MACK
 MAG INTERNATIONAL
 MAHINDRA
 MAN
 MARMON
 MAXUS
 MAZDA
 MCI (Motor Coach Industries)
 MERCEDES-BENZ
 MERCURY
 MICRO-VETT
 MIDWAY (including American Cargo by Midway)
 MILES (Miles Electric Vehicles)
 MINI
 MITSUBISHI
 MORGAN OLSON
 MORITA
 MOTOEV
 MULTICAR
 NAVISTAR
 NEW FLYER
 NISSAN
 OLDSMOBILE
 OPEL
 OSHKOSH
 OTTAWA
 PETER PIRSCH
 PETERBILT
 PEUGEOT
 PIAGGIO
 PIERCE

PLYMOUTH
 PONTIAC
 PORSCHE
 PREVOST
 PROTERRA
 PVI (Protected Vehicles, Inc.)
 RAM
 RENAULT
 REO
 REVA
 REXHALL
 ROSENBAUER
 SAAB
 SATURN
 SCANIA
 SCHWARZE
 SCION
 SEAGRAVE
 SEAT
 SGMW (SAIC-GM-Wuling)
 SHINERAY
 SINOTRUK
 SISU
 SKODA
 SMART
 SMITH ELECTRIC
 SOLECTRIA
 SPARTAN
 SPECIAL TRUCKS INC (for Special Trucks, Inc.)
 SSANGYONG
 STAR EV
 STARCRAFT
 STARTRANS
 STERLING
 STEWART AND STEVENSON
 STUDEBAKER
 SUBARU
 SUPREME
 SUTPHEN
 SUZUKI
 TATA
 TATRA
 TESLA
 THINK
 TIGER TRUCK
 THOMAS BUILT
 TOYOTA
 TRANSTECH
 TURTLE TOP
 UD TRUCKS
 UTILIMASTER
 VANTAGE

VAN HOOL
VAUXHALL
VEHICLE PRODUCTION GROUP
VOLKSWAGEN
VOLVO
WALTER
WESTERN STAR
WEST-MARK
WESTMOR
WHEELED COACH

WHITE
WILLYS
WINNEBAGO
WORKHORSE (including Workhorse Chassis,
Workhorse Custom Chassis)
YUTONG
ZAP
ZENITH
ZENN

Appendix B - Law Enforcement and Emergency Response Designations

Each vehicle's Law Enforcement (LE) Designation (S-6) and Emergency Response (ER) Designation (S-7) must be consistent with the vehicle's specified Vehicle Type (A-6). The following table identifies whether each vehicle type can be designated as LE or ER vehicles.

Vehicle Type	Allowed LE Designations	Allowed ER Designations
Low-speed Vehicle	NO, YES	NO
Sedan/St Wgn Subcompact	NO, YES	NO
Sedan/St Wgn Compact	NO, YES	NO
Sedan/St Wgn Midsize	NO, YES	NO
Sedan/St Wgn Large	NO, YES	NO
Sedan Limousine	NO, YES	NO
LD SUV 4x2	NO, YES	NO
LD SUV 4x4	NO, YES	NO
LD Minivan 4x2 (Passenger)	NO, YES	NO
LD Minivan 4x2 (Cargo)	NO, YES	NO
LD Minivan 4x4 (Passenger)	NO, YES	NO
LD Minivan 4x4 (Cargo)	NO, YES	NO
LD Van 4x2 (Passenger)	NO, YES	NO
LD Van 4x2 (Cargo)	NO, YES	NO
LD Van 4x4 (Passenger)	NO, YES	NO
LD Van 4x4 (Cargo)	NO, YES	NO
LD Pickup 4x2	NO, YES	NO
LD Pickup 4x4	NO, YES	NO
LD Ambulance	NO	YES
LD Other 4x2	NO, YES	NO
MD Sedan/St Wgn Large	NO, YES	NO
MD Sedan Limousine	NO, YES	NO

MD SUV	NO, YES	NO, YES
MD Van (Passenger)	NO, YES	NO
MD Van (Cargo)	NO, YES	NO, YES
MD Pickup	NO, YES	NO, YES
MD Ambulance	NO	YES
MD Bus	NO, YES	NO
MD Other	NO, YES	NO, YES
Ambulance	NO	YES
HD	NO, YES	NO, YES
HD Ambulance	NO	YES
HD Bus	NO, YES	NO

Appendix C - Valid Fuel Type / Fuel Unit Combinations

Fuel consumption volumes or quantities are reported in data elements Fuel Type (F-2) and Fuel Units (F-3). Each fuel type supported by FAST can support fuel consumption reporting in one or more sets of units, listed in the following table.

Fuel Code	Fuel	Units Code	Units
B100	Bio-diesel	GAL	Gallons
		GGE	Gasoline Gallon Equivalents
B20	Bio-diesel B20 Blend	GAL	Gallons
		GGE	Gasoline Gallon Equivalents
CNG	Compressed Natural Gas	GAL@2400	Gallons at 2,400 PSI
		GAL@3000	Gallons at 3,000 PSI
		GAL@3600	Gallons at 3,600 PSI
		HF3	Hundred Cubic Feet
		GGE	Gasoline Gallon Equivalents
DSL	Diesel	GAL	Gallons
		GGE	Gasoline Gallon Equivalents
E85	E-85	GAL	Gallons
		GGE	Gasoline Gallon Equivalents
ELE	Electricity	KWH	Kilowatt Hours
		GGE	Gasoline Gallon Equivalents
GAS	Gasoline	GAL	Gallons
		GGE	Gasoline Gallon Equivalents
HYD	Hydrogen	KG	Kilograms
		GGE	Gasoline Gallon Equivalents
LNG	Liquified Natural Gas	GAL	Gallons

		GGE	Gasoline Gallon Equivalents
LPG	Liquified Petroleum Gas	GAL	Gallons
		GGE	Gasoline Gallon Equivalents
R100	Renewable Diesel	GAL	Gallons
		GGE	Gasoline Gallon Equivalents